



## The Sierra Nevada Climate Change Initiative

***A collaborative effort to positively address  
the effects of climate change in the Sierra***

### **Background**

The long-term potential effects of climate change in the Sierra Nevada include adverse impacts to the state's water supply, forest health, wildlife habitat and local economies. For example, scientists generally agree that the following, among other impacts, will likely result from a changing climate:

- More precipitation will fall as rain, not snow;
- Snowpack will melt earlier due to higher temperatures;
- Vegetation will "migrate" based on changed conditions, resulting in impacts on wildlife;
- Fires will start earlier in the year and will burn longer and hotter, consuming a larger amount of the landscape.

At the same time, the Sierra Nevada region and its communities hold the potential to contribute positively in efforts to reduce the effects of climate change through sequestering of carbon in Sierran forests, reducing the risk of wildfire through sustainable management, reducing localized emissions from Sierra residents and businesses and taking a leadership role in the development of alternative energy production in the region.

Nonetheless, given the potential impacts that are anticipated, adapting to changing conditions will be critical for those who live, work and recreate in the region. To realize the benefit of the Sierra Nevada's important contributions and to take the actions necessary to help adapt to changing conditions, the region needs a cohesive, strategic approach supported by key stakeholders.

### **Potential Actions**

With that in mind, the following actions should be considered as part of a Sierra Nevada Climate Change Action Plan:

1. Identify, encourage and support projects, including demonstration projects, designed to address climate change in the Sierra.
  - Develop a strategic approach with funding partners to support demonstration and pilot projects aimed at mitigation and adaptation of climate change effects.
  - Directly support actions that will contribute positively in reducing the effects of climate change through state, federal, non-profit and private investment/funding.
  - Support community and regional adaptation efforts through technical assistance, funding and information distribution.

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2. Establish a web-based information center for attracting and sharing information specific to the Sierra Nevada climate change issues among broad-based networks.
  - Become a portal for credible, Sierra-specific information on climate change, such as:
    - Climate change-related research/science;
    - Information on current mitigation and adaptation activities occurring in and applicable to the Sierra Nevada region;
    - Climate change educational information and sources of such information;
    - Information on “cumulative effects” related to climate change that agencies are incorporating in Environmental Assessments or Environmental Impact Statements to ensure consistency and thoroughness in these kinds of environmental documents.
  - Identify information gaps and support development of research to gather and distribute information in these areas.
3. Provide education and “unbiased advocacy” for actions within the Sierra Nevada region and the importance of investment in the region.
  - Provide information to policy makers, organizations and communities to increase understanding about the effects of climate change in the Sierra, the potential for mitigation and adaptation and the need for investment in this region.
  - Provide information to the general public to increase understanding and to encourage support for addressing climate change issues. This may include helping to develop “Climate Change Best Management Practices” and simple “how-to” guides for people who want to know what they can do as individuals, businesses or organizations to change behavior and reduce or mitigate impacts.
  - Provide information to educators to increase understanding and to encourage development of curricula that builds understanding among young people.
  - Help distill research and technical information into information products that can be used for actions at the local and regional levels.
4. Serve as a convener to bring together researchers, practitioners, educators, government representatives and the public to discuss and learn more about climate change and how people and resources in the Sierra can positively contribute.
  - Bring together researchers, practitioners, educators, government representatives and the public to discuss and learn more about climate change and how people and resources in the Sierra can contribute to mitigation and adaption efforts.
  - Organize teams of experts to develop strategies and identify actions for addressing climate change effects in the Sierra.
  - Provide support to Sierra Nevada communities and organizations in working together to implement cooperative programs to address climate change.

### **Next Steps**

The SNC will convene a broad array of stakeholders to discuss these and other possible actions with the objective of developing and implementing a Sierra Nevada Climate Change Action Plan. This will include state, federal and local agencies, as well as non-governmental organizations with an interest and stake in this matter.